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PURPOSE: To produce sufficient residual stress and expand fatigue limit, by subjecting the plate spring made of steel sheet to forming, heat treatment, and warm working or other treatment at a prescribed temp.

CONSTITUTION: The plate spring made of steel sheet is subjected to forming such as cutting, piercing, taper

working, etc., and to heat treatment of hardening. During or after tempering, the plate spring is subjected to warm working or blasting, etc., at a temp. where deformation resistance gives the maximum value, in the temp. range lower than the recrystallization temp. of steel and higher than the ordinary temp., for example, at 250W400°C. In this way, sufficient residual stress is produced and fatigue limit can be expanded.

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